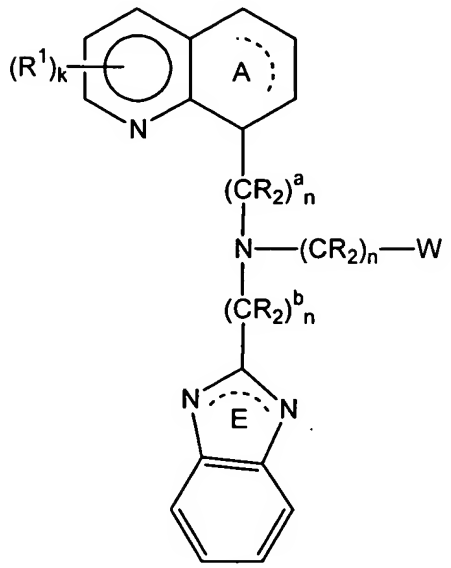
Claims

1. A compound of the formula



(1)

and the salts and prodrug forms thereof

wherein

the dotted lines represent optional unsaturation;

R^1 is a non-interfering substituent selected from halo, substituted or unsubstituted alkyl, substituted or unsubstituted hydroxyl, substituted or unsubstituted amino, substituted or unsubstituted thiol, and substituted or unsubstituted acyl;

k is 0-3;

each n is independently 0 or1;

each R is independently H or alkyl (1-6C);

W is a 5-6 membered heterocyclic ring comprising one or more heterotoms, optionally fused with a benzene ring, or a benzene ring fused with another 5-6 membered heterocyclic ring, optionally containing a double bond; wherein W is optionally substituted with Y_j;

j is 0-3;

each Y is independently a non-interfering substituent selected from the group consisting of halo, OR; SH; SO; SO_2;

optionally substituted phenyl;

- $(CR_2)_mOR$;
- $(CR_2)_mCOR$;
- $(CR_2)_mCOOR$;
- $(CR_2)_mN{=}CH{-}NR_2$;
- $(CR_2)_mCN$;
- $(CR_2)_mNR^5{}_2$;
- $(CR_2)_mNR(CR_2)_mNRR^4$;
- $(CR_2)_mNR(CR_2)_mNR(CR_2)_mNR^5{}_2$;
- $(CR_2)_mCO(CR_2)_mNR^5{}_2$;
- $(CR_2)_mCO(CR_2)_mNR(CR_2)_mNRR^4$;
- $(CR_2)_mCO(CR_2)_mNR(CR_2)_mNR(CR_2)_mNR^5{}_2$;
- $(CR_2)_mNRCO(CR_2)_mNRR^4$;
- $(CR_2)_mNRCO(CR_2)_mNR(CR_2)_mNR^5{}_2$;
- $(CR_2)_mNRCO(CR_2)_mNR(CR_2)_mNR(CR_2)_mNR(CR_2)_mNR^5{}_2$;
- $(CR_2)_mNROH$;
- $(CR_2)_mCONROH$;
- $(CR_2)_mCR{=}NOH$;
- $(CR_2)_m$ guanidino;
- $(CR_2)_mCONHNHR$; and
- $(CR_2)_m$ amidino;

wherein R is H or alkyl (1-6C), each m is independently 0-4, and each R^4 and each R^5 is independently H, alkyl (1-6C), alkenyl (1-6C), alkynyl (1-6C), or acyl (1-6C), each optionally substituted by one or more nonaromatic, nonheterocyclic substituent(s) and a indicates the linker between Ring A and N and b indicates the linker between ring E and the N.

2. The compound of claim 1, wherein E comprises a pi bond coupled to one N.

3. The compound of claim 1, wherein ring A is saturated.

4. The compound of claim 1, wherein k is 0-1.

5. The compound of claim 4, wherein the ring system which includes A is tetrahydroquinoline or a substituted form thereof.

6. The compound of claim 1, wherein one of $(CR_2)^a_n$ and $(CR_2)^b_n$ is CH_2 and the other is a bond.

7. The compound of claim 6, wherein $(CR_2)^a_n$ is a bond and $(CR_2)^b_n$ is CH_2.

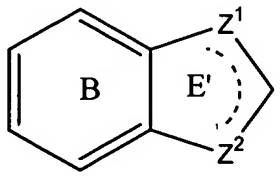
8. The compound of claim 7, wherein the ring system that includes A is tetrahydroquinoline or a substituted form thereof.

9. The compound of claim 8, wherein ring E comprises a pi bond coupled to one N.

10. The compound of claim 9, wherein W is a 5-6 membered heterocyclic ring optionally substituted with $(CR_2)_m$ $-NH_2$ where m = 0-1, benzyl or halo.

11. The compound of claim 10, wherein W is pyridyl, oxazolyl or imidazolyl.

12. The compound of claim 9, wherein W is of the formula



wherein the dotted line represents optional unsaturation;

Z^1 and Z^2 are both heteroatoms, or one of Z^1 and Z^2 is a heteroatom and the other is carbon;

and wherein W is linked to $(CR_2)_n$ through the B or E' ring.

13. The compound of claim 12, wherein Z^1 and Z^2 are independently N or O.

14. The compound of claim 11, wherein at least one Y is $-(CR_2)_m - NH_2$, where m = 0-1, benzyl or halo.

15. The compound of claim 11, wherein said compound is selected from the group consisting of

(1H-benzimidazol-2-ylmethyl)-(5,6,7,8-tetrahydroquinolin-8-yl)-[(1-aminomethyl)-benzoxazol-3-ylmethyl)]-amine;

(1H-benzimidazol-2-ylmethyl)-(5,6,7,8-tetrahydroquinolin-8-yl)-[(1-benzyl-2-aminomethyl)-imidazol-5-ylmethyl)]-amine;

6-aminomethylpyridin-3-ylmethyl-(1H-benzimidazol-2-ylmethyl)-(5,6,7,8-tetrahydroquinolin-8-yl)-amine;

(6-aminopyridin-3-ylmethyl)-(benzimidazol-2-ylmethyl)-(5,6,7,8-tetrahydroquinolin-8-yl)-amine;

(2-aminopyridin-3-ylmethyl)-(benzimidazol-2-ylmethyl)-(5,6,7,8-tetrahydro-8-quinolinyl)-amine;

(6-amino-pyridin-2-ylmethyl)-(1H-benzimidazol-2-ylmethyl)-(5,6,7,8-tetrahydro-quinolin-8-yl)-amine;

(4-amino-pyridin-3-ylmethyl)-(1H-benzimidazol-2-ylmethyl)-(5,6,7,8-tetrahydro-quinolin-8-yl)-amine;

(1H-benzimidazol-2-ylmethyl)-(5,6,7,8-tetrahydroquinolin-8-yl)-(imidazol-2-yl)-methylamine;

4-{[(1H-benzimidazol-2-ylmethyl)-(5,6,7,8-tetrahydro-quinolin-8-yl)-amino]-methyl}-2,6-dichloropyridine;

(1H-benzimidazol-2-ylmethyl)-benzooxazol-5-ylmethyl-(5,6,7,8-tetrahydro-quinolin-8-yl)-amine;

pyridin-2-ylmethyl-(1H-benzimidazol-2-ylmethyl)-(5,6,7,8-tetrahydroquinolin-8-yl)-amine;

(1H-benzimidazol-2-ylmethyl)-benzoxazol-6-ylmethyl-(5,6,7,8-tetrahydro-quinolin-8-yl)-amine;

(1H-benzimidazol-4-ylmethyl)-(1H-benzimidazol-2-ylmethyl)-(5,6,7,8-tetrahydro-quinolin-8-yl)-amine;

(1H-benzimidazol-2-ylmethyl)-pyridin-4-ylmethyl-(5,6,7,8-tetrahydro-quinolin-8-yl)-amine; (1H-benzimidazol-2-ylmethyl)-(benzo[1,3]dioxol-4-ylmethyl)-(5,6,7,8-tetrahydro-quinolin-8-yl)-amine;

benzo[1,3]dioxol-5-ylmethyl-(1H-benzoimidazol-2-ylmethyl)-(5,6,7,8-tetrahydro-quinolin-8-yl)-amine;

(1H-benzimidazol-2-ylmethyl)-(2,3-dihydro-benzofuran-7-ylmethyl)-(5,6,7,8-tetrahydro-quinolin-8-yl)-amine;

(1H-benzimidazol-2-ylmethyl)-pyridin-3-ylmethyl-(5,6,7,8-tetrahydro-quinolin-8-yl)-amine;

(1H-benzoimidazol-5-ylmethyl)-(1H-benzoimidazol-2-ylmethyl)-(5,6,7,8-tetrahydro-quinolin-8-yl)-amine;

bis-(1H-benzimidazol-2-ylmethyl)-(5,6,7,8-tetrahydro-quinolin-8-yl)-amine; (1H-benzimidazol-2-ylmethyl)-(3H-imidazol-4-ylmethyl)-(5,6,7,8-tetrahydro-quinolin-8-yl)-amine; or a salt thereof.

16. A pharmaceutical composition for modulating chemokine receptor activity comprising a therapeutically effective amount of the compound of claim 11.

17. The pharmaceutical composition of claim 16, wherein $(CR_2)^a_n$ is a bond and $(CR_2)^b_n$ is CH_2.

18. The pharmaceutical composition of claim 17, wherein the ring system that includes A is tetrahydroquinoline or a substituted form thereof.

19. The pharmaceutical composition of claim 18, wherein ring E comprises a pi bond

coupled to one N.

20. A pharmaceutical composition for modulating chemokine receptor activity comprising a therapeutically effective amount of the compound of claim 15.

21. A method to treat HIV or FIV, comprising administering to a subject in need of such treatment an effective amount of the compound of any of claim 1, or a pharmaceutical composition thereof.